CLAIMS

1.   A system operable to identify and access information about a user (109) of a distributed communication system in real time without the users intervention, wherein the system comprises at least one service device (108) operable to pro-vide services to said user (109), at least one access device (105a) operable to provide access to said distributed communication system, **characterized in** that said system also comprises at least one control means (101; 103) connected to said at least one access device (105a) and to said at least one service device (108), a to said at least one access device (105a) connected identification device (113) operable to identifying an address of a specific user, at least one storage device (102; 104) connected to said at least one control means (101; 103), and a to said at least one control means (101; 103) connected cache means (111) operable to store mappings of said addresses and identifications for said users (109), wherein said service device (108) sends a request for information about a user re-questing a service from said service device (108) to said control means (101; 103), which control means (101; 103) checks if said cache means contains an up to date identification, and if said check gives an affirmative answer said control means (101; 103) fetches said information from said storage device (102; 104) and sends a reply comprising said information to said service device (108), or if said check gives a negative answer said control means (101; 103) sends a request for a real time identification of said address to said access device (105a), which access de-vice (105a) identifies said address with the aid of said identification device (113) and sends said identification to said control means (101; 103), which control means (101; 103) fetches said information from said storage device (102; 104) and sends a reply comprising said information to said service device (108).

2.   A system operable to identify and access information about a user (109) of a distributed communication system according to Claim 1, **characterized in** that said system is divided into a number of geographical regions based on the dis-tance between different geographical regions.

3.   A system operable to identify and access information about a user (109) of a distributed communication system according to Claim 2, **characterized in** that

said distance is measured by the delay between individual control means (101; 103) in said system.

4.   A system operable to identify and access information about a user (109) of a distributed communication system according to any one of Claims 2 – 3, **characterized in** that each geographical region comprises a central control means (101), a central storage device (102), and in that each geographical region can comprise at least one regional control means (103), at least on e regional storage device (104), and at least one access device (105a).

5.   A system operable to identify and access information about a user (109) of a distributed communication system according to Claim 4, **characterized in** that each geographical region also can comprise a supplier means (106a) operable to distribute information, and at least one attach means (107a) operable to attach additional information to identifications, wherein said supplier means (106a) is connected to said at least one access device (105a) and to said at least one at-tach means (107a).

6.   A system operable to identify and access information about a user (109) of a distributed communication system according to any one of Claims 1 – 5, **characterized in** that each service device (108) is connected to a first interface unit (110), which in turn is connected to said at least one control means (101; 103), in that each control means (101; 103) is connected to a second interface unit (112), which in turn is connected to said at least one access device (105a), and in that each control means (101; 103) also is connected to said at least one storage device (102; 104).

7.   A system operable to identity and access information about a user (109) of a distributed communication system according to any one of Claims 1 – 6, **characterized in** that said distributed communication system is the Internet.

8.   A system operable to identity and access information about a user (109) of a distributed communication system according to any one of Claims 1 – 7, **characterized in** that each service device (108) is an online service provider

(108), each access device (105a) is an Internet access provider (105a), and each control means (101; 103) is a server (101; 103).

9.   A system operable to identify and access information about a user (109) of
a distributed communication system according to any one of Claims 5 – 8, **charac-
terized in** that each supplier means (106a) is a first supplier server (106a), and
each attach means (107a) is a second supplier server (107a).

10.   A system operable to identify and access information about a user (109) of
a distributed communication system according to any one of Claims 7- 9, **charac-
terized in** that said address of a user (109) is an IP-address.

11.   A method for identifying and accessing information about a user (109) of a
distributed communication system in real time without the users intervention,
wherein said method is performed with the aid of a system comprising at least one
service device (108) operable to provide services to said user (109), and at least
one access device (105a) operable to provide access to said distributed communi-
cation system, said method comprises the steps of:

- that a user (109) requests a service (A), implicitly of explicitly, from a service
  device (108);
- that said service device (108) sends a request for additional information about
  said user (109) to a control means (101; 103);
- said control means (101, 103) checks if a cache means (111) connected to
  said control means (101; 103) contains an up to date identification;
- if said check gives an affirmative answer said control means (101; 103) fetches
  said information from a to said control means (101; 103) connected storage
  device (102; 104) and sends a reply comprising said information to said service
  device (108); or
- if said check gives a negative answer said control means (101, 103) sends a
  request for a real time identification of an address of said user (109) to said ac-
  cess device (105a);
- said access device (105a) identifies said address with the aid of a to said ac-
  cess device (105a) connected identification device (113), and sends said iden-
  tification to said control means (101; 103);

- said control means (101; 103) fetches said information from a to said control means (101; 103) connected storage device (102; 104), and sends a reply comprising said information to said service device (108).

12. A method for identifying and accessing information about a user (109) of a distributed communication system according to Claim 11, **characterized in** that said system also comprises a to said each service device (108) connected, first interface unit (110), and a to said each control means (101; 103) connected, second interface unit (112), wherein the method also comprises the following steps:

- said request sent from said service device (108) is forwarded by said first interface unit (110), which first interface unit (110) decides which control means (101; 103) to send said request to; and

- said request sent from said control means (101; 103) for a real time identification of an address of said user (109) is forwarded by said second interface unit (112) which selects which access device (105a) to send said request to.

13. A method for identification and accessing information about a user (109) of a distributed communication system according to any one of Claims 11 – 12, **characterized in** that said system is divided into a number of geographical regions based on the distance between different geographical regions.

14. A method for identification and accessing information about a user (109) of a distributed communication system according to Claim 13, **characterized in** that said distance is measured by the delay between individual control means (101; 103) in said system.

15. A method for identification and accessing information about a user (109) of a distributed communication system according to any one of Claims 13 – 14, **characterized in** that each geographical region comprises a central control means (101), a central storage device (102), and in that each geographical region can comprise at least one regional control means (103), at least one regional storage device (104), at least one access device (105a), a supplier means (106a) operable to distribute information, and at least one attach means (107a) operable to attach additional information to identifications, wherein said supplier means (106a) is

connected to said at least one access device (105a) and to said at least one attach means (107a).

16.   A method for identification and accessing information about a user (109) of a distributed communication system according to any one of Claims 11 – 15, **characterized in** that said method also comprises the following steps:

- said control means (101; 103) updates said cache means (111) with a mapping between said address and an identification for each said request forwarded by said first interface unit (110);

- said control means (101; 103) receives a mapping between said address and said identification by querying said access device (105a), or directly from another control means (101; 103);

- said control means (101; 103) stores said mapping together with a time stamp in an internal cache means (111);

- said control means (101; 103) iterates through the currently stored mappings between said address and said identification in said internal cache means (111) if a predetermined time has elapsed since the stored time stamp for said entry; and

- if said address is invalid, which is verified by querying said access device 105a, said entry in said internal cache means (111) is removed; or

- if said address is valid, which is verified by querying said access device 105a, said entry is updated with a new time stamp.

17.   A method for identification and accessing information about a user (109) of a distributed communication system according to any one of Claims15 – 16, **characterized in** that said method also comprises the following steps:

- said central control means (101), within a first geographical region, downloads mappings between access account information and an identifier from said access device (105a), which mapping data is stored in said central storage device (102) within said first geographical region;

- said supplier means (106a) within said first geographical region downloads mappings between access account information and an identifier from said access device (105a) within said first geographical region;
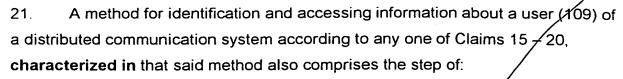
- said supplier means (106a) within said first geographical region distributes said information and identifier to said attach means (107a) in said first region, which attach means (107a) attach additional information to said identifier;
- said attach means (107a) in said first region sends the new total information and identifier to said central control means (101) within said first region; and
- said new total information and identifier are stored in said central storage device (102) in said first region.

18.   A method for identification and accessing information about a user (109) of a distributed communication system according to Claim 17, **characterized in** that said method also comprises the steps of:
- said central control means (101) distributes said mapping data to said regional control means (103); and
- said mapping data are stored in said regional storage device (104).

19.   A method for identification and accessing information about a user (109) of a distributed communication system according to any one of Claims 15 – 18, **characterized in** that said method also comprises the steps of:
- said central control means (101) in said first region distributes said mapping data to central control means (101) in another geographical region if there are service devices (108) requesting said information from said regional control means (103) or said central control means (101) in another region than said first region; and
- said mappings data are stored in said central storage device (102) in said another region.

20.   A method for identification and accessing information about a user (109) of a distributed communication system according to any one of Claims 15 – 19, **characterized in** that said method also comprises the steps of:
- said central control means (101) in said first region distributes said mapping data to regional control means (103) in other geographical regions if there are service devices (108) in another region than said first region requesting said information from sad regional control means (103).

21.   A method for identification and accessing information about a user (109) of a distributed communication system according to any one of Claims 15 - 20, **characterized in** that said method also comprises the step of:

-     that said user (109) can interact with said control means (101; 103).

22.   A method for identification and accessing information about a user (109) of a distributed communication system according to Claim 12, **characterized in** that said interaction is comprised of said user (109) is giving feedback to an action taken by said service device (108), wherein said feedback is stored in said storage device (102; 104).

23.   A method for identification and accessing information about a user (109) of a distributed communication system according to any one of Claims 11 – 22, **characterized in** that said distributed communication system is the Internet.

24.   A method for identification and accessing information about a user (109) of a distributed communication system according to any one of Claims 11 – 23, **characterized in** that each service device (108) is an online service provider (108), each access device (105a) is an Internet access provider (105a), and each control means (101; 103) is a server (101; 103).

25.   A method for identification and accessing information about a user (109) of a distributed communication system according to any one of Claims 15 – 24, **characterized in** that each supplier means (106a) is a first supplier server (106a), and each attach means (107a) is a second supplier server (107a).

26.   A method for identification and accessing information about a user (109) of a distributed communication system according to any one of Claims 15 - 25 **characterized in** that said address of a user (109) is an IP-address.

27.   At least one computer program product (102_1, ..., 102_n) directly loadable into the internal memory of at least one digital computer (100_1, ..., 100_n), comprising software code portions for performing the steps of claim 11 when said at least one product (102_1, ..., 102_n) is/are run on said at least one computer (100_1, ..., 100_n).